

# EXHIBIT 5

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EXHIBITS: 9 to 10

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
OAKLAND DIVISION

Civil Action No. 4:18-cv-06753-PJH

In Re:

RIPPLE LABS, INC.  
LITIGATION

This Document Relates To:

ALL ACTIONS

VIDEOTAPED DEPOSITION OF STEVEN P.  
FEINSTEIN, called as a witness on behalf of  
the Defendants, pursuant to the applicable  
provisions of the Federal Rules of Civil  
Procedure, before Jeanette N. Maracas,  
Registered Professional Reporter and Notary  
Public in and for the Commonwealth of  
Massachusetts, at the Offices of Morgan,  
Lewis & Bockius, One Federal Street, Boston,  
Massachusetts, on Friday, January 20, 2023,  
commencing at 9:41 a.m.

<p>1 APPEARANCES:</p> <p>2</p> <p>3 SUSMAN GODFREY, LLP</p> <p>4 By: Nicholas N. Spear, Esq.</p> <p>5 1900 Avenue of the Stars</p> <p>6 Los Angeles, CA 90067</p> <p>7 For the Lead Plaintiff.</p> <p>8 Nspear@susmangodfrey.com</p> <p>9</p> <p>10 KING &amp; SPALDING, LLP</p> <p>11 By: Andrew Michaelson, Esq.</p> <p>12 By: Luke N. Roniger, Esq. (Texas)</p> <p>13 By: Jared Lax, Esq. (via Zoom)</p> <p>14 1185 Avenue of the Americas</p> <p>15 New York, NY 10036</p> <p>16 For the Defendants.</p> <p>17 Amichaelson@kslaw.com</p> <p>18 Lroniger@kslaw.com</p> <p>19</p> <p>20 Shawn Budd, Videographer.</p> <p>21</p> <p>22 ALSO PRESENT VIA ZOOM:</p> <p>23</p> <p>24 Ana Guardado, Esq., Ripple Labs, Inc.</p> <p>25</p> <p style="text-align: right;">Page 2</p>	<p>1 PROCEEDINGS 09:40:39</p> <p>2 VIDEOGRAPHER: We are on the record. 09:40:39</p> <p>3 This is the videographer speaking, Shawn 09:41:46</p> <p>4 Budd with Veritext Legal Solutions. Today's 09:41:48</p> <p>5 date is January 20, 2023, and the time is 09:41:51</p> <p>6 9:41 a.m. We are here at the offices of 09:41:55</p> <p>7 Morgan Lewis, Boston, Massachusetts to take 09:41:59</p> <p>8 the video deposition of Dr. Steven Feinstein 09:42:02</p> <p>9 in the matter of Ripple Labs, Inc. 09:42:06</p> <p>10 litigation. 09:42:09</p> <p>11 Will counsel please introduce 09:42:10</p> <p>12 themselves for the record. 09:42:11</p> <p>13 MR. SPEAR: Nick Spear, Susman 09:42:13</p> <p>14 Godfrey for lead plaintiff, Bradley Sostack. 09:42:16</p> <p>15 MR. MICHAELSON: Andrew Michaelson 09:42:20</p> <p>16 from King &amp; Spalding representing defendants, 09:42:21</p> <p>17 and joined by my colleague, Luke Roniger, 09:42:25</p> <p>18 also from King &amp; Spalding in person. My 09:42:29</p> <p>19 colleague, Jared Lax, also from King &amp; 09:42:30</p> <p>20 Spalding, is attending remotely and Ana 09:42:35</p> <p>21 Guardado, in-house counsel at Ripple, is 09:42:40</p> <p>22 also joining remotely. 09:42:42</p> <p>23 VIDEOGRAPHER: The court reporter 09:42:43</p> <p>24 today is Jeanette Maracas. Will you please 09:42:44</p> <p>25 swear in the witness. 09:42:47</p> <p style="text-align: right;">Page 4</p>
<p>1 INDEX</p> <p>2 Testimony of: Direct Cross</p> <p>3 Steven P. Feinstein</p> <p>4 (by Mr. Michaelson) 5</p> <p>5</p> <p>6 EXHIBITS</p> <p>7 No. Description Page</p> <p>8</p> <p>9 Exhibit 9 Deposition notice. 19</p> <p>10</p> <p>11 Exhibit 10 Exhibit 62, Expert</p> <p>12 Report of Steven P.</p> <p>13 Feinstein, 11/18/22. 24</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p style="text-align: right;">Page 3</p>	<p>1 STEVEN P. FEINSTEIN</p> <p>2 A witness called for examination</p> <p>3 by counsel for the Defendants, having been</p> <p>4 first duly sworn, was examined and testified</p> <p>5 as follows:</p> <p>6 DIRECT EXAMINATION</p> <p>7 BY MR. MICHAELSON: 09:43:06</p> <p>8 Q. Good morning, Dr. Feinstein. My name is 09:43:08</p> <p>9 Andrew Michaelson from King &amp; Spalding 09:43:18</p> <p>10 representing defendants. How are you today? 09:43:22</p> <p>11 A. Fine, thank you. 09:43:24</p> <p>12 Q. Let me go over a few groundrules that should 09:43:25</p> <p>13 help make today go more smoothly. You may 09:43:27</p> <p>14 be familiar with them, but I'll go through 09:43:28</p> <p>15 them nonetheless. 09:43:29</p> <p>16 First, do you understand you're 09:43:31</p> <p>17 under oath just as you would be in a 09:43:32</p> <p>18 courtroom at trial, is that correct? 09:43:34</p> <p>19 A. Yes. 09:43:37</p> <p>20 Q. And you understand that we have a court 09:43:37</p> <p>21 reporter who is taking down every word that 09:43:39</p> <p>22 you and I say? 09:43:41</p> <p>23 A. Yes. 09:43:42</p> <p>24 Q. Is there any reason why you can't give 09:43:42</p> <p>25 complete truthful testimony today? 09:43:47</p> <p style="text-align: right;">Page 5</p>

<p>1 Q. I see. Have you visited the website of 09:57:54  2 any other crypto exchange aside from 09:57:58  3 Coinbase? 09:58:00  4 A. I may have. I don't recall specifically, 09:58:02  5 but I may have. Not that I recall 09:58:04  6 specifically as I sit here now. 09:58:08  7 Q. So you may have, but you don't recall today? 09:58:10  8 A. Correct. 09:58:12  9 Q. Okay. 09:58:12  10 A. Names that appear -- for example, what I'm 09:58:17  11 referring to here is if I read an article 09:58:20  12 and they cite Gemini, for example, I may have 09:58:22  13 Googled quickly Gemini and seen what comes 09:58:25  14 up, but I did that again not in connection 09:58:30  15 with this case. 09:58:31  16 Q. And I'm not prying into financial details 09:58:32  17 here, but I do just want to ask what your 09:58:38  18 experience is in trading digital assets, and 09:58:41  19 you said that you bought some small amount 09:58:44  20 of digital assets on Coinbase. Do you still 09:58:47  21 own digital assets today? 09:58:51  22 A. No. 09:58:53  23 Q. Approximately how many trades in digital 09:58:54  24 assets have you made? 09:59:00  25 A. Two, a purchase and a sale of Ethereum. 09:59:01</p> <p style="text-align: right;">Page 18</p>	<p>1 not really pursuant to. 10:01:07  2 Q. Fair enough. I'd like to direct your 10:01:08  3 attention to Page 3 of the document which is 10:01:10  4 the request for production of documents. 10:01:12  5 A. Okay. 10:01:15  6 Q. And have you seen these requests before? 10:01:16  7 A. Did you say these requests? 10:01:23  8 Q. Have you seen this set of document requests 10:01:24  9 before? 10:01:27  10 A. This exhibit, yes, I've seen this document. 10:01:27  11 Q. Did you undertake to collect documents in 10:01:30  12 response to this request? 10:01:33  13 A. I did. 10:01:35  14 Q. Was there any document that you're aware 10:01:35  15 of that are responsive to these requests 10:01:43  16 that you didn't provide to your counsel for 10:01:44  17 production in this case? 10:01:46  18 MR. SPEAR: Objection. I'll just 10:01:48  19 note that we objected to certain documents or 10:01:49  20 certain parts of these as not being things 10:01:53  21 that we were going to produce. Are you 10:01:55  22 asking -- I'm not sure what you're asking. 10:01:57  23 MR. MICHAELSON: I was asking if 10:02:00  24 he's aware of something that's responsive to 10:02:01  25 these that he didn't share with counsel, but 10:02:03</p> <p style="text-align: right;">Page 20</p>
<p>1 Q. So a purchase and a sale of Ethereum. 09:59:06  2 Okay. Have you visited the XRP Ledger in 09:59:10  3 preparation for today's deposition? 09:59:29  4 A. No. 09:59:32  5 Q. Did you visit or interact at all with the 09:59:32  6 XRP Ledger in preparation for submitting 09:59:38  7 your report in this case? 09:59:41  8 A. No. 09:59:42  9 MR. MICHAELSON: I'd like to mark 09:59:47  10 as Exhibit 9... 09:59:48  11 (Exhibit 9 marked for 10:00:13  12 identification.) 10:00:15  13 Q. I handed you a document marked Defense 10:00:21  14 Exhibit 9 which is titled on the first page 10:00:31  15 Defendants' Notice of Deposition of Steven P. 10:00:33  16 Feinstein with a Request For Documents. 10:00:36  17 It's a four-page exhibit. Are you familiar 10:00:40  18 with this document? 10:00:45  19 A. Yes. 10:00:47  20 Q. You've seen it before? 10:00:47  21 A. Yes. 10:00:49  22 Q. Do you understand that you're appearing here 10:00:50  23 today pursuant to this notice of deposition? 10:00:56  24 A. I'll take your word for it. I was asked to 10:01:00  25 appear here and that's why I'm here. It's 10:01:04</p> <p style="text-align: right;">Page 19</p>	<p>1 I understand the nature of your objection. 10:02:09  2 To be honest, we just got the production 10:02:12  3 less than, I think, 48 hours ago and we've 10:02:15  4 transferred to our vendor 24 hours ago and 10:02:17  5 some of it we haven't been able to access 10:02:21  6 yet, so we're sitting here today not entirely 10:02:24  7 sure what it fully contains, the production, 10:02:28  8 because it was made so close in time to 10:02:30  9 the deposition. I guess I'll focus on No. 6. 10:02:32  10 Is there an objection to No. 6? 10:02:38  11 MR. SPEAR: I don't believe so, 10:02:40  12 other than just I don't think we found 10:02:42  13 anything. Go ahead. 10:02:43  14 Q. I'll direct your attention to Request No. 6. 10:02:45  15 A. Yes. 10:02:53  16 Q. No. 6 is a request for all of your public 10:02:53  17 statements, publications, writings, notes 10:02:56  18 slides or presentations relating to XRP, 10:02:58  19 Ripple, cryptocurrency or any other 10:03:02  20 blockchain technology. Do you see that? 10:03:05  21 A. I do. 10:03:06  22 Q. Do you have any documents responsive to 10:03:06  23 this request? 10:03:08  24 A. Depends on how one interprets "relating." I 10:03:09  25 interpreted "relating" to mean that it 10:03:13</p> <p style="text-align: right;">Page 21</p>

<p>1 specifically mentions these words, "XRP, 10:03:16</p> <p>2 Ripple, cryptocurrency or any other 10:03:24</p> <p>3 blockchain technology," and I believe I have 10:03:27</p> <p>4 no such statements, publications, writings 10:03:31</p> <p>5 that specifically mention these words or 10:03:37</p> <p>6 topics, although, of course, these topics 10:03:39</p> <p>7 are subsumed within the -- are covered within 10:03:42</p> <p>8 the field of financial economics in general. 10:03:46</p> <p>9 I didn't provide every statement that relates 10:03:50</p> <p>10 to finance, but I believe that nothing was 10:03:53</p> <p>11 provided here because I have no statements 10:03:58</p> <p>12 and documentation that specifically cites 10:04:01</p> <p>13 XRP or Ripple and so on. 10:04:04</p> <p>14 Q. I see. So I understand you to be saying that 10:04:06</p> <p>15 you have made public statements, publications 10:04:10</p> <p>16 concerning finance, correct? 10:04:13</p> <p>17 A. That's right, and finance applies to -- the 10:04:14</p> <p>18 analysis and study of finance applies to XRP 10:04:19</p> <p>19 and Ripple, but I didn't believe that's what 10:04:22</p> <p>20 you meant by this Statement 6 request. 10:04:24</p> <p>21 Q. Okay. The publications, focusing on 10:04:26</p> <p>22 publications for a moment. The publications 10:04:30</p> <p>23 that you've authored concerning finance don't 10:04:33</p> <p>24 mention XRP or Ripple, correct? 10:04:36</p> <p>25 A. That's correct. 10:04:39</p> <p style="text-align: right;">Page 22</p>	<p>1 A. Again, it depends on -- I'm not a lawyer 10:06:03</p> <p>2 so it depends on how one is defining 10:06:06</p> <p>3 "responsive to," and that was a decision 10:06:09</p> <p>4 and determination made by counsel. Let me 10:06:12</p> <p>5 elaborate, because I did not turn over to 10:06:17</p> <p>6 counsel reports or testimony that's covered 10:06:19</p> <p>7 by protective orders that preclude my 10:06:23</p> <p>8 making them public. 10:06:26</p> <p>9 Q. Okay. 10:06:27</p> <p>10 A. But everything else I endeavored to collect 10:06:32</p> <p>11 and provided to plaintiff's counsel. 10:06:36</p> <p>12 Plaintiff's counsel made a determination as 10:06:43</p> <p>13 to what to give to you, is my understanding. 10:06:44</p> <p>14 Q. Okay. 10:06:46</p> <p>15 MR. SPEAR: Just for the record, 10:06:51</p> <p>16 whatever information -- just so we don't 10:06:53</p> <p>17 beat around the bush, whatever they gave us 10:06:56</p> <p>18 in response to No. 4 we just produced. We 10:06:56</p> <p>19 didn't share it beyond what they gave us. 10:06:59</p> <p>20 MR. MICHAELSON: Okay. 10:07:03</p> <p>21 MR. SPEAR: It's the same for No. 5. 10:07:18</p> <p>22 MR. MICHAELSON: Mark this No. 10. 10:07:26</p> <p>23 (Exhibit 10 marked for 10:07:28</p> <p>24 identification.) 10:07:29</p> <p>25 Q. Before moving on to Exhibit 10, just a last 10:07:40</p> <p style="text-align: right;">Page 24</p>
<p>1 Q. They don't mention cryptocurrency? 10:04:40</p> <p>2 A. Correct. 10:04:42</p> <p>3 Q. And they don't mention any other blockchain 10:04:43</p> <p>4 technology? 10:04:47</p> <p>5 A. Again correct. 10:04:47</p> <p>6 Q. Do they mention digital assets? 10:04:48</p> <p>7 A. No. 10:04:50</p> <p>8 Q. Virtual currencies? 10:04:50</p> <p>9 A. To the best of my recollection, no. 10:04:52</p> <p>10 Q. How about Bitcoin? 10:04:55</p> <p>11 A. No. 10:04:56</p> <p>12 Q. Ethereum? 10:04:56</p> <p>13 A. No. 10:05:00</p> <p>14 Q. I'd like to direct your attention to Request 10:05:00</p> <p>15 No. 4, all opinions, reports, testimony 10:05:33</p> <p>16 and/or declarations you submitted that 10:05:39</p> <p>17 pertain to damages in cases involving or 10:05:41</p> <p>18 related to state or federal securities 10:05:45</p> <p>19 actions over the past ten years. Do you 10:05:48</p> <p>20 see that request? 10:05:50</p> <p>21 A. I do. 10:05:50</p> <p>22 Q. Did you provide all documents responsive 10:05:51</p> <p>23 to this request to your counsel? 10:05:58</p> <p>24 MR. SPEAR: Objection. Subject to 10:06:00</p> <p>25 our objections, but go ahead. 10:06:01</p> <p style="text-align: right;">Page 23</p>	<p>1 question on Exhibit 9, request, document 10:08:10</p> <p>2 Request No. 6. I just want to make sure 10:08:15</p> <p>3 that you do not have any notes, class notes 10:08:26</p> <p>4 that mention XRP, Ripple, cryptocurrency 10:08:35</p> <p>5 or any other blockchain technology? 10:08:39</p> <p>6 A. Correct, not class notes. Again, 10:08:45</p> <p>7 specifically class notes, notes I use for 10:08:52</p> <p>8 teaching, no. I believe I do not have any 10:08:55</p> <p>9 that specifically mention XRP, Ripple or 10:09:01</p> <p>10 cryptocurrency. 10:09:05</p> <p>11 Q. Or any other blockchain technology? 10:09:07</p> <p>12 A. Correct. 10:09:09</p> <p>13 Q. Slides, lecture outlines, do you have any 10:09:10</p> <p>14 slides or lecture outlines that mention XRP, 10:09:14</p> <p>15 Ripple, cryptocurrency or any other 10:09:17</p> <p>16 blockchain technology? 10:09:21</p> <p>17 A. Correct. 10:09:22</p> <p>18 Q. Correct, you don't have any? 10:09:23</p> <p>19 A. I do not have those. 10:09:25</p> <p>20 Q. And the notes that -- you paused for a moment 10:09:27</p> <p>21 on notes. Do you have some kind of notes 10:09:29</p> <p>22 other than class notes that mention XRP, 10:09:31</p> <p>23 Ripple, cryptocurrency or other blockchain 10:09:34</p> <p>24 technology? 10:09:37</p> <p>25 A. I'll tell you what I'm thinking. My 10:09:38</p> <p style="text-align: right;">Page 25</p>

1 of some debate that has, in my opinion, 10:59:19	1 methodology? 11:02:24
2 no bearing on my opinions. It's not 10:59:21	2 A. Yes. 11:02:25
3 something I wrote about in my report or 10:59:23	3 Q. Does that methodology need to take into 11:02:25
4 expressed as an opinion. There are 10:59:26	4 account the contractual terms that are 11:02:28
5 representations and allegations from both 10:59:34	5 expressed in the bilateral contract? 11:02:31
6 sides in this case about what XRP was 10:59:37	6 A. Just the prices and the quantities and the 11:02:33
7 used for and how it would be used and why 10:59:41	7 times. Prices, quantities, the form of 11:02:35
8 it had value, whether the ledger was 10:59:45	8 the consideration, the time the transaction 11:02:39
9 centralized or decentralized, for example, 10:59:47	9 took place is all that you would need. 11:02:41
10 but none of that had any bearing on my 10:59:51	10 Q. So you need information contained in the 11:02:43
11 opinions. 10:59:53	11 contract to perform that calculation, 11:02:52
12 Q. So whether XRP has utility or not have any 10:59:54	12 correct? 11:02:55
13 bearing on your opinion? 11:00:05	13 MR. SPEAR: Objection. 11:02:55
14 MR. SPEAR: Objection, scope. 11:00:06	14 A. No, just the standard facts and details 11:02:57
15 A. Well, my opinion as spelled out in this 11:00:07	15 that describe any transaction, the same 11:02:59
16 report is that there's a common method for 11:00:10	16 common information that would commonly be 11:03:01
17 computing damages for all class members. 11:00:14	17 supplied by any class member for purposes 11:03:04
18 The common method is consistent with 11:00:19	18 of calculating that class member's damages. 11:03:07
19 plaintiff's theory of liability, and I lay 11:00:22	19 Q. Could the contract, though, supply, for 11:03:10
20 out what that method is. That is really 11:00:27	20 example, the price? 11:03:12
21 what I wrote about in this report, and so 11:00:33	21 A. Like I said, price would need to be known. 11:03:15
22 specific idiosyncracies of XRP versus 11:00:37	22 In any damage calculation in any class action 11:03:18
23 other crypto digital assets did not matter. 11:00:41	23 litigation, you need to know prices. 11:03:21
24 As I sit here now, that's my thinking. 11:00:46	24 Sometimes you -- my understanding is that 11:03:26
25 Q. Sitting here today, do you have an 11:00:49	25 prices, price data for a claimant's 11:03:31
Page 50	Page 52
1 understanding as to whether a use of XRP 11:00:58	1 transactions is supplied by the claimant 11:03:36
2 could impact calculation of profit or 11:01:06	2 to the claims administrator, and whether 11:03:38
3 loss made by someone who owns it? 11:01:11	3 that price is documented in an exchange or 11:03:42
4 A. Well, it could certainly impact the profit 11:01:16	4 brokerage confirmation versus some other 11:03:48
5 or loss that was realized, but it would 11:01:18	5 form doesn't matter for purposes of applying 11:03:52
6 not impact the formula used for calculating 11:01:20	6 the formula. 11:03:57
7 the profit or loss and the damages. 11:01:23	7 Q. So it sounds like you have in mind a claims 11:03:58
8 Q. Sitting here today, do you know whether 11:01:26	8 process where the claimant would come forward 11:04:11
9 XRP is traded pursuant to any bilateral 11:01:32	9 with the inputs needed to, certain to your 11:04:14
10 contracts? 11:01:40	10 methodology, to your formula to determine 11:04:19
11 MR. SPEAR: Objection to form. 11:01:41	11 profit or loss, is that correct? 11:04:23
12 A. What do you mean by "bilateral contracts"? 11:01:42	12 A. That's typically how damages are ultimately 11:04:26
13 Q. A contract between two parties to buy or 11:01:47	13 calculated in a class action securities case. 11:04:28
14 sell an asset. 11:01:49	14 Q. So turning to Exhibit 10 here, your report, 11:04:38
15 A. Some trading took place that way, is my 11:01:50	15 I'd refer you to Page 4, you express your 11:04:50
16 understanding. 11:01:54	16 conclusion which is I think what you're 11:04:54
17 Q. So you are aware that some XRP exchanged 11:01:54	17 referring to, you opine here on Paragraph 16, 11:04:58
18 hands pursuant to bilateral contracts? 11:01:59	18 Page 4, the damages can be computed using 11:05:03
19 A. Well, we usually call that in finance an 11:02:03	19 a common methodology for all class members 11:05:11
20 over-the-counter transaction, and my 11:02:05	20 and the common classwide methodology for 11:05:16
21 understanding is there were some 11:02:07	21 determining damages for all XRP purchasers 11:05:21
22 over-the-counter transactions. 11:02:09	22 involves the straightforward application of 11:05:26
23 Q. Where XRP is exchanged pursuant to an 11:02:12	23 statutory arithmetic formulas? 11:05:30
24 over-the-counter transaction, can profit or 11:02:19	24 A. Yes. 11:05:34
25 loss be calculated pursuant to a common 11:02:20	25 Q. Sir, are you opining -- you're opining that 11:05:35
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1 damages can be computed using a common 11:05:47	1 interest rate should be applied. 11:08:42
2 methodology, correct? 11:05:51	2 Q. Anything else? 11:08:44
3 A. Yes. 11:05:51	3 A. The formula is on Page 5. Those are the 11:08:50
4 Q. Are you opining that they can be computed 11:05:52	4 arguments of the formula that we just 11:08:50
5 using common evidence? 11:05:56	5 covered, so no. 11:08:56
6 A. I think "evidence" has a specific legal 11:05:58	6 Q. You mentioned that you need information as 11:08:56
7 meaning, and I'm not a lawyer. So if you 11:06:00	7 to whether there had been a sale. What did 11:08:59
8 mean data, that the same data, the same 11:06:05	8 you mean by that? 11:09:02
9 type of data is needed from each claimant, 11:06:11	9 A. Well, you would need to know. I mean, the 11:09:02
10 that's true, the same type of data, and I 11:06:13	10 class members are people who purchased and 11:09:04
11 mentioned already what that data would be. 11:06:17	11 then sold XRP and sustained a loss. These 11:09:08
12 "Evidence" is a legal term, that I can answer 11:06:20	12 are the proposed class members, or those 11:09:12
13 the question if you explain it better. 11:06:22	13 who still own XRP, they purchased it and 11:09:16
14 Q. Got it. Well, I guess what I'm hearing you 11:06:24	14 still own it. So notice that Paragraph 19 11:09:19
15 say is that the claimant would need to come 11:06:28	15 has a formula for one and 20 has got the 11:09:23
16 forth with the information concerning their 11:06:30	16 adaptation of that same formula for the 11:09:28
17 purchase or sale in order for the calculation 11:06:32	17 other, so you need to know whether they 11:09:30
18 to be run? 11:06:36	18 still own XRP or not. 11:09:32
19 A. That's one way to do it. There are other 11:06:37	19 Q. I see. So the information as to whether 11:09:33
20 ways to calculate damages, but to apply the 11:06:39	20 there has been a sale is important to know 11:09:40
21 common formula that's in my report, one would 11:06:42	21 which, whether they're in Paragraphs 19 or 11:09:43
22 need price and quantity data for purchases 11:06:45	22 20? 11:09:45
23 and sales, if there was a sale for anybody 11:06:50	23 A. Right. 11:09:48
24 whose damages are going to be calculated, 11:06:56	24 Q. Okay. And then you said you would need to 11:09:48
25 so it's common data and it's common formulas 11:06:59	25 know the form of consideration paid. What 11:09:50
Page 54	Page 56
1 that are used. 11:07:03	1 did you mean by that? 11:09:52
2 Q. So you need the price data and you need 11:07:03	2 A. Was Bitcoin tendered for the XRP or was 11:09:53
3 the quantity data? 11:07:10	3 it Tether or U.S. dollars, and you need to 11:10:01
4 A. Right, how much did the person pay and 11:07:11	4 know that so that you can translate the 11:10:03
5 when did they pay it and how much XRP did 11:07:15	5 consideration, you can value the 11:10:04
6 they receive, and the same thing on the 11:07:21	6 consideration at the time of the 11:10:06
7 sale, if there was a sale, or we would need 11:07:24	7 transactions. 11:10:07
8 to know that there was no sale. 11:07:32	8 Q. If someone paid Bitcoin, used Bitcoin to 11:10:08
9 Q. Is any other data needed aside from the 11:07:34	9 purchase XRP, wouldn't the value of the 11:10:17
10 price data and quantity data? 11:07:38	10 consideration paid be the amount of Bitcoin 11:10:22
11 A. I said price data, price, quantity, both at 11:07:40	11 they paid for the XRP? 11:10:25
12 the time of sale and the time, time of 11:07:45	12 A. It would be the value of the Bitcoin paid. 11:10:27
13 purchase and time of sale information as to 11:07:47	13 Q. Why not just the -- so the value of the 11:10:29
14 whether or not there was a sale because 11:07:50	14 Bitcoin? 11:10:32
15 there may not have been, the form of the 11:07:53	15 A. The formula, the statute says consideration 11:10:34
16 consideration paid. That's it. Wait. 11:07:57	16 with interest thereon. The word 11:10:37
17 Right, that's it. That's what's in the 11:08:09	17 "consideration" I guess can either mean 11:10:42
18 formula. 11:08:11	18 the form of the consideration or the value 11:10:45
19 Again, if there was -- the example 11:08:13	19 of the consideration, and I think from the 11:10:46
20 I gave in the interrogatory did not apply 11:08:18	20 context it's pretty clear that it's the 11:10:47
21 interest that could have been earned, the 11:08:25	21 value of the consideration, so that would 11:10:50
22 opportunity interest on the consideration, 11:08:27	22 be dollars, how many dollars were those 11:10:52
23 but if one were to include the interest, you 11:08:31	23 Bitcoin worth at the time the XRP was 11:10:54
24 would also need guidance from the court or 11:08:34	24 purchased. 11:10:57
25 agreement among the parties as to what 11:08:40	25 Q. Okay. So let's, we'll break this down a 11:10:58
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1 little bit. It was helpful to hear your 11:11:04	1 a person who obtained XRP in exchange for 11:14:14
2 explanation. 11:11:06	2 a tangible good? 11:14:19
3 Going back to Paragraph 16, you 11:11:07	3 A. Yes. 11:14:20
4 express that your opinion here relates to a 11:11:12	4 Q. Just to be clear on the scope of your 11:14:20
5 common classwide methodology for determining 11:11:16	5 opinion, it sounds like it is not part of 11:14:35
6 damages for all XRP purchasers. What does 11:11:18	6 the scope of your opinion who is or who 11:14:41
7 it mean to purchase XRP? 11:11:26	7 is not a purchaser of XRP? 11:14:43
8 MR. SPEAR: Objection to form. 11:11:28	8 A. That's correct. 11:14:48
9 A. It's almost a philosophical question. To 11:11:32	9 Q. So you're not opining on who is or is not 11:14:48
10 pay a counterparty and receive XRP, quid pro 11:11:37	10 a purchaser of XRP, correct? 11:14:54
11 quo in exchange for that payment. 11:11:44	11 A. Correct. 11:14:56
12 Q. So if you receive XRP as a gift, are you a 11:11:51	12 Q. Does your opinion encompass the 11:14:56
13 purchaser of XRP? 11:11:59	13 identification of people who are purchasers 11:15:01
14 MR. SPEAR: Objection, calls for a 11:12:00	14 of XRP? 11:15:05
15 legal conclusion. 11:12:01	15 A. How is that different from the previous 11:15:06
16 A. I would have to say I don't know. That's a 11:12:03	16 question? 11:15:09
17 legal determination. 11:12:06	17 Q. The first question is more of a conceptual 11:15:10
18 Q. Can your methodology apply to individuals 11:12:07	18 question of like categorically speaking, 11:15:15
19 who obtained XRP via gift? 11:12:11	19 who would count or not in the determination 11:15:18
20 A. I'm not sure. That's something I would have 11:12:22	20 of who is a purchaser of XRP. The second 11:15:20
21 to think about. 11:12:25	21 is actually like identifying the class 11:15:21
22 Q. Do you have any understanding as to whether 11:12:26	22 members. 11:15:23
23 Ripple has employees? 11:12:28	23 A. No. I haven't been asked to identify class 11:15:24
24 A. I'm sure they do have employees. 11:12:32	24 members and nothing about that is expressed 11:15:26
25 Q. To the extent a Ripple employee receives 11:12:34	25 in my report. 11:15:28
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1 XRP as a form of their compensation, are 11:12:37	1 Q. Okay. Does your opinion encompass price 11:15:29
2 they a purchaser of XRP? 11:12:43	2 correlation between XRP and any other 11:15:35
3 MR. SPEAR: Objection, calls for 11:12:45	3 digital asset? 11:15:37
4 a legal conclusion. 11:12:46	4 A. What do you mean by "correlation"? 11:15:39
5 A. Again, that does sound like -- the answer 11:12:47	5 Q. Whether the price or value of XRP is 11:15:41
6 to that question must be covered somewhere 11:12:50	6 correlated with movements in prices of 11:15:44
7 in the law, and I'm not a lawyer. I can 11:12:53	7 other digital assets. 11:15:46
8 answer economic questions. I don't think 11:12:57	8 A. I have expressed that to apply the formula, 11:15:48
9 that is an economic question, so I think 11:13:00	9 one should convert whatever the form of 11:15:53
10 I should just say I don't know for sure. 11:13:03	10 the consideration was to the value of the 11:15:57
11 I don't want to say, give an answer that's 11:13:04	11 consideration. So exchange rates and 11:15:59
12 contrary to established law, case law or 11:13:06	12 valuations are relevant to apply the common 11:16:04
13 statute. I think the case law and statute 11:13:10	13 methodology commonly for all class members, 11:16:09
14 should speak for itself and legal experts 11:13:12	14 but correlation usually means movement 11:16:12
15 can decide that. 11:13:14	15 over time, and that I haven't expressed 11:16:15
16 Q. Can the common methodology that you propose 11:13:15	16 anything about movement over time. 11:16:18
17 in your opinion be applied to those who 11:13:20	17 Q. Okay. Yes, that's what I was asking about, 11:16:20
18 acquire XRP as compensation for their work? 11:13:24	18 whether the price of XRP correlates over 11:16:24
19 A. I think it can. 11:13:28	19 time with the price of digital assets, not 11:16:27
20 Q. Do you have an understanding as to whether 11:13:31	20 something that's the subject of your opinion, 11:16:31
21 someone could sell a tangible good like a 11:13:46	21 correct? 11:16:32
22 cup of coffee in exchange for XRP? 11:13:51	22 A. Say that again, please? 11:16:33
23 A. I think that's possible. 11:13:56	23 Q. It's fair to say that your opinion does not 11:16:35
24 Q. Can your common methodology be used to 11:14:06	24 encompass whether the price of XRP correlates 11:16:40
25 calculate the gain or loss experienced by 11:14:09	25 with the price of any other digital asset 11:16:44
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1 Q. Okay. Does your opinion encompass price 11:15:29	1 Q. Okay. Does your opinion encompass price 11:15:29
2 correlation between XRP and any other 11:15:35	2 correlation between XRP and any other 11:15:35
3 digital asset? 11:15:37	3 digital asset? 11:15:37
4 A. What do you mean by "correlation"? 11:15:39	4 A. What do you mean by "correlation"? 11:15:39
5 Q. Whether the price or value of XRP is 11:15:41	5 Q. Whether the price or value of XRP is 11:15:41
6 correlated with movements in prices of 11:15:44	6 correlated with movements in prices of 11:15:44
7 other digital assets. 11:15:46	7 other digital assets. 11:15:46
8 A. I have expressed that to apply the formula, 11:15:48	8 A. I have expressed that to apply the formula, 11:15:48
9 one should convert whatever the form of 11:15:53	9 one should convert whatever the form of 11:15:53
10 the consideration was to the value of the 11:15:57	10 the consideration was to the value of the 11:15:57
11 consideration. So exchange rates and 11:15:59	11 consideration. So exchange rates and 11:15:59
12 valuations are relevant to apply the common 11:16:04	12 valuations are relevant to apply the common 11:16:04
13 methodology commonly for all class members, 11:16:09	13 methodology commonly for all class members, 11:16:09
14 but correlation usually means movement 11:16:12	14 but correlation usually means movement 11:16:12
15 over time, and that I haven't expressed 11:16:15	15 over time, and that I haven't expressed 11:16:15
16 anything about movement over time. 11:16:18	16 anything about movement over time. 11:16:18
17 Q. Okay. Yes, that's what I was asking about, 11:16:20	17 Q. Okay. Yes, that's what I was asking about, 11:16:20
18 whether the price of XRP correlates over 11:16:24	18 whether the price of XRP correlates over 11:16:24
19 time with the price of digital assets, not 11:16:27	19 time with the price of digital assets, not 11:16:27
20 something that's the subject of your opinion, 11:16:31	20 something that's the subject of your opinion, 11:16:31
21 correct? 11:16:32	21 correct? 11:16:32
22 A. Say that again, please? 11:16:33	22 A. Say that again, please? 11:16:33
23 Q. It's fair to say that your opinion does not 11:16:35	23 Q. It's fair to say that your opinion does not 11:16:35
24 encompass whether the price of XRP correlates 11:16:40	24 encompass whether the price of XRP correlates 11:16:40
25 with the price of any other digital asset 11:16:44	25 with the price of any other digital asset 11:16:44
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1 over time? 11:16:46	1 out that if there's a determination that 11:19:45
2 A. Right, I express no opinion about that 11:16:47	2 one doesn't need to translate the form 11:19:47
3 specifically. 11:16:50	3 of the consideration to the value of that 11:19:50
4 Q. Does your opinion encompass whether the 11:16:51	4 consideration in dollars, then that 11:19:51
5 price or value of XRP might vary across 11:17:01	5 methodology would also be common to all 11:19:53
6 exchanges at any given point in time? 11:17:08	6 class members. I just want to point out 11:19:55
7 A. I considered that. I believe given that, 11:17:13	7 that regardless of whether one does the 11:19:58
8 though that may be the case, these formulas, 11:17:19	8 translation or chooses not to do the 11:20:00
9 data exists such that these formulas can 11:17:23	9 translation, the methodology that's arrived 11:20:02
10 still be applied commonly for all class 11:17:27	10 at from making that determination will be 11:20:04
11 members. 11:17:29	11 common for all class remembers. I think 11:20:07
12 Q. So you agree it may be the case, that the 11:17:30	12 that's paramount and primary. 11:20:09
13 price of XRP varies at a given point in 11:17:35	13 However, if the methodology is to 11:20:12
14 time across exchanges? 11:17:38	14 translate forms of consideration to value 11:20:17
15 A. That may be the case, yes. 11:17:41	15 consideration in dollars, then you need 11:20:21
16 Q. And do you also agree that the price of, 11:17:42	16 exchange rates and Bloomberg provides them. 11:20:23
17 say, Bitcoin at a given point in time might 11:17:46	17 Q. To be clear, the methodology that you are 11:20:31
18 vary across exchanges? 11:17:49	18 putting forth in your opinion involves the 11:20:37
19 A. There seems to be evidence of that in the 11:17:52	19 conversion of consideration paid into U.S. 11:20:40
20 literature in the market, yes. It does 11:17:56	20 dollars? 11:20:44
21 not preclude calculation of damages commonly 11:17:58	21 A. My conclusion in Paragraph 16 is that the 11:20:45
22 for all class members. 11:18:04	22 methodology is common, and that conclusion 11:20:48
23 Q. You referred to evidence in the literature 11:18:05	23 holds firm whether we choose to translate 11:20:54
24 about price variation of Bitcoin across 11:18:09	24 the consideration into dollar value or 11:20:57
25 exchanges. What were you referring to? 11:18:12	25 choose not to translate the form of the 11:21:01
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1 A. I can't cite an article specifically, but 11:18:15	1 consideration to dollar value. So it's 11:21:04
2 this is an observation that's been made. 11:18:18	2 still, the conclusion that I represent 11:21:06
3 Q. Sitting here today, do you have a sense 11:18:21	3 in Paragraph 16 holds regardless. The 11:21:12
4 of how large or small that variation might 11:18:23	4 examples I gave in Paragraphs 19 and 20, 11:21:16
5 be? 11:18:29	5 these examples do translate consideration 11:21:16
6 A. No, but I did check Bloomberg and the 11:18:29	6 form into consideration value, and for that 11:21:19
7 documentation in Bloomberg that they've 11:18:36	7 you need exchange rates, and I verified 11:21:21
8 arrived at analytics and a methodology for 11:18:38	8 that exchange rates are available. 11:21:26
9 producing data that according to Bloomberg 11:18:42	9 Q. This is helpful. In Paragraphs 19 and 20 11:21:28
10 represents the value of digital assets at 11:18:47	10 of your report, you put forward formulas for 11:21:37
11 various points in time, notwithstanding 11:18:49	11 calculating damages, correct? 11:21:40
12 that the trading price might be different on 11:18:52	12 A. Yes. 11:21:44
13 one exchange versus another. 11:18:55	13 Q. But what I hear you saying is these are 11:21:44
14 Q. Is this Bloomberg data to which you're 11:18:59	14 just examples of formulas that might be used, 11:21:49
15 referring something that you would use in 11:19:07	15 but there are other competing formulas that 11:21:52
16 the computation of gain or loss pursuant 11:19:10	16 might also be used to calculate damages. Is 11:21:54
17 to your methodology? 11:19:12	17 that a fair summary of your testimony? 11:21:57
18 A. You can. 11:19:14	18 MR. SPEAR: Objection. 11:21:58
19 Q. You referenced you needed to translate the 11:19:18	19 A. I'm saying I believe these are the formulas 11:21:59
20 consideration paid into U.S. dollars. So, 11:19:23	20 that should be used. I do understand that 11:22:03
21 for example, if someone bought XRP with 11:19:25	21 it's possible that an alternative formula 11:22:04
22 Bitcoin, you need to translate, under your 11:19:29	22 that's very similar, there may be a 11:22:09
23 methodology, the value of that Bitcoin into 11:19:33	23 determination that that other similar formula 11:22:12
24 U.S. dollars, correct? 11:19:36	24 is more appropriate, and I'm pointing out 11:22:15
25 A. Well, first of all, I just want to point 11:19:38	25 that even if it were not these formulas but 11:22:19
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1 the very similar alternative formula, it 11:22:22	1 better model does involve converting the 11:24:43
2 would still be a common damage methodology 11:22:25	2 consideration into U.S. dollars, but you 11:24:49
3 for all class members. 11:22:28	3 have not yet opined on how that conversion 11:24:51
4 I do believe these are the correct 11:22:29	4 would be performed? 11:24:56
5 formulas and these are the formulas that 11:22:31	5 A. No, that's not true at all. It's the same 11:24:56
6 ought to be used, but I just want to point 11:22:33	6 model, how much you paid for XRP versus 11:25:03
7 out that my opinion in Paragraph 16 is 11:22:35	7 how much you got back when you sold your 11:25:06
8 maintained even if one were to modify this 11:22:37	8 XRP. If you got back less than you paid, 11:25:08
9 formula slightly in the way we've been 11:22:40	9 that's a loss, and how it's translated into 11:25:11
10 describing. 11:22:43	10 dollars, there's a slight tweak, there's 11:25:16
11 Q. You say a common methodology can be used 11:22:44	11 different ways of doing that. 11:25:19
12 to calculate damages, but what that 11:22:46	12 I think the best way to do it is 11:25:20
13 methodology is could take different forms? 11:22:48	13 to do the translation at the time of the 11:25:22
14 A. Well, two that I can think of that we've 11:22:51	14 transactions. I believe that's consistent 11:25:24
15 talked about, they're very similar, I believe 11:22:54	15 with the statute, the language in the 11:25:26
16 of those two, the formulas in Paragraphs 19 11:22:59	16 statute, and I verified that there are 11:25:29
17 and 20 are the correct ones. 11:23:02	17 databases that allow one to do that. In 11:25:33
18 Q. Okay. When you say we've talked about two, 11:23:04	18 fact, I provided defendants with an example 11:25:35
19 you're referring to one formula that would 11:23:07	19 of that calculation done. But at this point, 11:25:40
20 involve translating consideration paid into 11:23:09	20 I'm saying that I haven't yet calculated 11:25:42
21 U.S. dollars, that's one method. A different 11:23:14	21 damages for the entire class or for members 11:25:45
22 method would be leaving the consideration 11:23:19	22 of the class beyond Mr. Sostack, and it's 11:25:51
23 paid in whatever form it was paid, whether 11:23:21	23 altogether possible that exactly which 11:25:54
24 that be Bitcoin, Tether or Ethereum? 11:23:25	24 exchange rates to use, that's what I want to 11:25:59
25 A. Correct. 11:23:29	25 focus on, exactly which database for the 11:26:02
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1 Q. In then in your model, the one that you're 11:23:29	1 exchange rates is not something that I 11:26:05
2 proposing in Paragraphs 19 and 20, there's 11:23:34	2 was asked to opine about or need to opine 11:26:11
3 this conversion into U.S. dollars, correct? 11:23:36	3 about in order to proffer the opinion that 11:26:14
4 A. Well, in order to calculate consideration, 11:23:39	4 it's a common damage methodology for all 11:26:17
5 one would convert the form of the 11:23:43	5 class members. 11:26:19
6 consideration to that dollar value of the 11:23:45	6 Q. So I have a bunch of questions about these 11:26:20
7 consideration. 11:23:47	7 exchange rates. Does the scope of your 11:26:29
8 Q. What is your proposal for what exchange 11:23:48	8 opinion include what exchange rate would be 11:26:34
9 rates would be used to translate, for 11:23:53	9 used to translate consideration paid into 11:26:39
10 example, Bitcoin or Ethereum into U.S. 11:23:56	10 U.S. dollars? 11:26:43
11 dollars? 11:23:58	11 A. No, it doesn't need to. We know that 11:26:45
12 A. What I check is that we have Bloomberg, 11:23:59	12 exchange rates exist. The choice of the 11:26:48
13 Bloomberg is a good source, it's 11:24:03	13 best, most appropriate, most reliable 11:26:53
14 reputable, but at this point I don't think 11:24:04	14 exchange rate data doesn't impact or 11:26:56
15 I have to -- I just want to reserve the 11:24:08	15 doesn't affect the opinion that it's a 11:27:03
16 option to consider it further. That's not 11:24:16	16 common damage methodology for all class 11:27:06
17 part of my opinion right now, which is the 11:24:18	17 members which is the opinion I'm offering 11:27:08
18 best data source to use. If I were to do 11:24:20	18 today and in this report. 11:27:10
19 damages, I might at a later date decide that 11:24:23	19 Q. You could imagine two different purchasers 11:27:11
20 there was a better data source. I know 11:24:26	20 of XRP, one who had just before buying XRP 11:27:14
21 that for sure there's at least Bloomberg, 11:24:28	21 converted U.S. dollars to Bitcoin and then 11:27:20
22 but my opinion at this point does not 11:24:31	22 used that Bitcoin to buy XRP. You can 11:27:24
23 encompass a determination that Bloomberg is 11:24:33	23 imagine another purchaser of XRP who had 11:27:26
24 the only or best data source to use. 11:24:35	24 just Bitcoin holdings in their Coinbase 11:27:29
25 Q. So you think that the preferred model, the 11:24:38	25 account, for example, had been holding the 11:27:32
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1	Bitcoin for some period of time and they	11:27:34	1	witness' testimony.	11:30:03
2	used that Bitcoin to purchase XRP. What	11:27:36	2	A. I'm saying that that's within the realm	11:30:04
3	exchange rate would you propose is the	11:27:47	3	of possibility. It would still be a common	11:30:07
4	best exchange rate in each of those two	11:27:49	4	methodology. Personally, I think the best	11:30:09
5	scenarios?	11:27:51	5	methodology would be to use the value of	11:30:12
6	MR. SPEAR: Objection, scope.	11:27:52	6	the Bitcoin at the time of the transaction	11:30:15
7	A. As an economist, I think the best exchange	11:27:53	7	according to a reputable database. But	11:30:17
8	rate is the exchange rate at the time of	11:27:58	8	if there's some legal determination that	11:30:22
9	the transactions, although if there's a	11:28:00	9	overrides the economic analysis, what one	11:30:24
10	legal opinion that says no, it should be,	11:28:02	10	is left with still is a common methodology	11:30:29
11	consideration should be left in the form	11:28:07	11	for all class members.	11:30:31
12	until settlement or jury verdict, then you	11:28:09	12	Q. So what you personally think would be the	11:30:33
13	would use the exchange rates of the later	11:28:13	13	best methodology is the value of Bitcoin	11:30:35
14	date.	11:28:15	14	at the time of the transaction as determined	11:30:37
15	So as an economist, I have an	11:28:16	15	by a reputable database, and you have	11:30:42
16	opinion which is the best, which represents	11:28:17	16	Bloomberg in mind for that?	11:30:47
17	damages and I actually think that's most	11:28:21	17	A. Bloomberg is a reputable database. I haven't	11:30:48
18	consistent with the statute, language in the	11:28:23	18	yet determined whether it's the only or the	11:30:53
19	statute, but it doesn't change my opinion	11:28:26	19	best, but it's certainly available for this	11:30:54
20	about there being a common damage methodology	11:28:28	20	purpose.	11:30:56
21	if the law or the court or the parties agree	11:28:31	21	Q. Would you agree that if that were the	11:30:56
22	on a different time to do the translation.	11:28:34	22	methodology that were used, that the	11:30:58
23	Q. For the first of the two hypothetical	11:28:39	23	calculation of an individual purchaser's	11:31:00
24	purchasers that I mentioned who had	11:28:42	24	gain or loss might differ from their sort	11:31:01
25	transferred U.S. dollars into Bitcoin just	11:28:46	25	of real-world experience because, for	11:31:04
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1	before the transaction and then used the	11:28:49	1	example, they just acquired that Bitcoin	11:31:06
2	Bitcoin immediately to buy XRP, would	11:28:52	2	with dollars that cost them a little more or	11:31:09
3	the actual exchange rate that that person	11:28:58	3	less than what Bloomberg might say was the	11:31:11
4	obtained transferring U.S. dollars into	11:29:00	4	exchange rate at the time?	11:31:15
5	Bitcoin be the right to use or more of like	11:29:05	5	MR. SPEAR: Objection to form.	11:31:15
6	a general Bloomberg rate?	11:29:07	6	Objection to scope.	11:31:16
7	MR. SPEAR: Objection, scope. Go	11:29:10	7	A. If you've got different alternatives, the	11:31:18
8	ahead.	11:29:14	8	outcome of the different alternatives might	11:31:26
9	A. It's a hypothetical you're asking about.	11:29:14	9	be different. In the hypothetical you	11:31:29
10	I'm sure there are details of this	11:29:17	10	gave, it's hard to believe that it would be	11:31:32
11	hypothetical that are not explicated in	11:29:19	11	materially different. Bloomberg being a	11:31:34
12	your offering of the hypothetical. I would	11:29:24	12	reputable database seeks to assess what the	11:31:36
13	want to look at all the facts. Whatever	11:29:27	13	value of these different digital assets	11:31:41
14	the answer is, you're still left with a	11:29:31	14	actually are at a point in time, so that	11:31:45
15	common methodology for all class members.	11:29:35	15	would give you an assessment of the value	11:31:48
16	I kind of want to reserve the opportunity	11:29:38	16	of the consideration paid even if there	11:31:52
17	to think about that some more if it turns	11:29:40	17	had been a different transaction external to	11:31:54
18	out that that hypothetical is realistic. I	11:29:44	18	the XRP purchase at a different price.	11:31:59
19	think I'll leave it at that.	11:29:48	19	Q. Do crypto exchanges, to your knowledge,	11:32:11
20	Q. What I hear you saying is it could be that	11:29:49	20	typically charge transaction fees?	11:32:18
21	different exchange rates could be used	11:29:55	21	A. I'm not sure. I know there's a bid-ask	11:32:25
22	for different types of purchasers of XRP	11:29:56	22	spread. I just don't recall whether	11:32:29
23	depending on the circumstances of their	11:29:59	23	there's -- some might charge a commission	11:32:33
24	purchase?	11:30:02	24	on top of a bid-ask spread, some might not.	11:32:36
25	MR. SPEAR: Objection, misstates	11:30:02	25	I know there generally is a bid-ask spread	11:32:47
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<p>1 if they included a bid-ask spread, the 01:14:25</p> <p>2 bid-ask spread transaction cost was included 01:14:28</p> <p>3 and incorporated, but I did not include 01:14:33</p> <p>4 commissions as a cost. 01:14:35</p> <p>5 Q. When you say if a fee was included in the 01:14:39</p> <p>6 bid-ask spread, you mean that fee is 01:14:42</p> <p>7 baked into the transaction price that he 01:14:45</p> <p>8 experiences, correct? 01:14:48</p> <p>9 A. Correct. 01:14:49</p> <p>10 Q. Okay. Did you perform any analysis as to 01:14:50</p> <p>11 whether, had you calculated -- let me scratch 01:14:54</p> <p>12 that. 01:15:02</p> <p>13 Where a trader like Mr. Sostack 01:15:09</p> <p>14 buys, multiple buys and multiple sales, how 01:15:14</p> <p>15 do you calculate gain or loss? Do you use a 01:15:18</p> <p>16 FIFO analysis, LIFO? How do you -- 01:15:22</p> <p>17 A. In the case of Mr. Sostack, I did it both 01:15:25</p> <p>18 ways and it did not make any difference. 01:15:28</p> <p>19 Q. Would you agree that there are instances 01:15:31</p> <p>20 where it can make a difference whether you 01:15:34</p> <p>21 use FIFO or LIFO? 01:15:37</p> <p>22 A. Yes. 01:15:39</p> <p>23 Q. Would you agree that that could impact, 01:15:40</p> <p>24 depending on what methodology is picked, 01:15:51</p> <p>25 FIFO or LIFO, that some class members here 01:15:54</p> <p style="text-align: right;">Page 106</p>	<p>1 thinks the LIFO or FIFO method is the 01:17:02</p> <p>2 better method, I think that's outside the 01:17:06</p> <p>3 scope of his opinions, but that's the 01:17:08</p> <p>4 objection. I'm not instructing him not to 01:17:09</p> <p>5 answer. I'm objecting on scope grounds. 01:17:15</p> <p>6 Q. Okay. When calculating Mr. Sostack's 01:17:20</p> <p>7 damages, do you recall whether he, whether 01:17:29</p> <p>8 certain of his purchases involved Bitcoin? 01:17:35</p> <p>9 A. I'm sorry? 01:17:38</p> <p>10 Q. Did certain of his purchases involve Bitcoin? 01:17:38</p> <p>11 A. Yes. 01:17:44</p> <p>12 Q. And certain of his transactions involved 01:17:44</p> <p>13 Tether? 01:17:47</p> <p>14 A. That's correct. 01:17:48</p> <p>15 Q. And what did you use to calculate the 01:17:49</p> <p>16 amount paid at time of purchase in those 01:17:56</p> <p>17 instances where Mr. Sostack used Bitcoin 01:18:00</p> <p>18 to purchase XRP? 01:18:02</p> <p>19 A. His transaction records indicated how 01:18:04</p> <p>20 much Bitcoin he paid and Bloomberg data 01:18:09</p> <p>21 was used to translate quantity of Bitcoin 01:18:15</p> <p>22 to dollars, dollar value. 01:18:19</p> <p>23 Q. Precisely what Bloomberg data? 01:18:22</p> <p>24 A. Bloomberg provides exchange rates between 01:18:29</p> <p>25 Bitcoin in dollars, and I used that data 01:18:33</p> <p style="text-align: right;">Page 108</p>
<p>1 could be impacted favorably and others 01:15:57</p> <p>2 unfavorably? 01:16:02</p> <p>3 A. It's possible. 01:16:02</p> <p>4 Q. Have you determined what methodology would 01:16:03</p> <p>5 be the appropriate methodology to use here, 01:16:06</p> <p>6 FIFO or LIFO? 01:16:09</p> <p>7 MR. SPEAR: Objection, scope. 01:16:11</p> <p>8 A. No, but I have determined that whichever 01:16:12</p> <p>9 methodology is dictated would produce a 01:16:18</p> <p>10 methodology for calculating damages that's 01:16:23</p> <p>11 common for all class members. Usually 01:16:25</p> <p>12 it's a legal determination or an agreement 01:16:28</p> <p>13 among the parties as to whether LIFO or 01:16:31</p> <p>14 FIFO should be used. 01:16:33</p> <p>15 MR. MICHAELSON: Mr. Spear, could 01:16:38</p> <p>16 you explain the scope objection there? You 01:16:39</p> <p>17 objected to that question based on scope, 01:16:42</p> <p>18 and I'm trying to understand what the basis 01:16:43</p> <p>19 of that objection is. 01:16:45</p> <p>20 MR. SPEAR: I think he's testified 01:16:46</p> <p>21 a few times today like the mechanics of 01:16:48</p> <p>22 his methodology. If you're asking whether 01:16:50</p> <p>23 LIFO or FIFO would not be a classwide 01:16:54</p> <p>24 application, it goes to the scope of the 01:16:57</p> <p>25 opinions. If you're asking him whether he 01:17:01</p> <p style="text-align: right;">Page 107</p>	<p>1 precisely I specified as of 4:00 p.m., so 01:18:37</p> <p>2 end of trading day in New York. 01:18:41</p> <p>3 Q. Did you know at the time what time Mr. 01:18:45</p> <p>4 Sostack's transaction happened? 01:18:49</p> <p>5 A. No. 01:18:51</p> <p>6 Q. Do you know if on the Bloomberg data, does 01:18:52</p> <p>7 it have data for every minute of the day 01:18:58</p> <p>8 or only 4:00 p.m.? 01:19:03</p> <p>9 A. I believe you can specify other times during 01:19:05</p> <p>10 the day. 01:19:09</p> <p>11 Q. And you specified four o'clock? 01:19:10</p> <p>12 A. Yes. 01:19:11</p> <p>13 Q. Do you know if Mr. Sostack's trading records 01:19:12</p> <p>14 reflected the time of his transaction 01:19:16</p> <p>15 involving Bitcoin? 01:19:21</p> <p>16 A. My recollection is that they did not, and 01:19:22</p> <p>17 it's fairly standard methodology applied in 01:19:27</p> <p>18 other class action cases to use end-of-day 01:19:31</p> <p>19 data for these sort of purposes. 01:19:35</p> <p>20 Q. And in those other cases, does the asset 01:19:37</p> <p>21 trade 24 hours a day? 01:19:41</p> <p>22 A. Sometimes, yes. Bonds do, currencies do. 01:19:44</p> <p>23 Q. And would you agree that if you used the 01:19:48</p> <p>24 Bitcoin-to-dollar exchange rate at the time 01:19:51</p> <p>25 of transaction rather than at end of day 4:00 01:19:53</p> <p style="text-align: right;">Page 109</p>

1 p.m., that could affect some class members 01:19:59	1 A. I hadn't thought about it before you were 01:23:31
2 favorably and some class members unfavorably? 01:20:01	2 asking about it today, and I'm not sure 01:23:33
3 MR. SPEAR: Objection, calls for 01:20:04	3 from a legal perspective whether someone 01:23:38
4 speculation. 01:20:05	4 who's paid in XRP is considered a purchaser 01:23:41
5 A. I don't know for sure, but it's possible. 01:20:05	5 of XRP. As I sit here now, it's my first 01:23:44
6 Q. Referring to your damages models at 01:20:15	6 impression, which may change as I consider 01:23:50
7 Paragraphs 19 and 20 of your report, the 01:20:37	7 it further, but my first impression is that 01:23:52
8 first input is the dollar amount paid at 01:20:41	8 it certainly could. It would measure the 01:23:55
9 time of purchase. How would you apply 01:20:44	9 value of the XRP that was delivered with an 01:23:57
10 this methodology to someone who acquired 01:20:51	10 understanding that that's what the person 01:24:00
11 XRP as payment for their work, for example, 01:20:57	11 was getting paid. 01:24:02
12 from their employer? 01:21:01	12 Q. How would this methodology apply to someone 01:24:04
13 A. First of all, I don't know if I would. 01:21:04	13 who acquired XRP in exchange for a tangible 01:24:06
14 That seems to be a legal determination 01:21:06	14 good, like a cup of coffee? 01:24:09
15 whether that hypothetical person would be 01:21:08	15 A. You could do the same thing, look at the 01:24:20
16 a member of the class, but it's certainly 01:21:13	16 quantity of XRP and the value in terms of 01:24:21
17 theoretically possible to value the work 01:21:23	17 dollars of the XRP at the time of that 01:24:24
18 that is being paid for or just use the 01:21:25	18 transaction. 01:24:25
19 quantity of XRP that's being delivered and 01:21:33	19 Q. How would it apply to someone who acquired 01:24:37
20 a market price of the XRP at that time. 01:21:35	20 XRP pursuant to a bilateral contract 01:24:49
21 Q. Even in the case of -- even if the 01:21:39	21 providing for the exchange of XRP? 01:24:55
22 compensation, the amount of XRP that the 01:21:59	22 A. As I sit here now, I think you could do the 01:25:04
23 employee would receive was set months in 01:22:03	23 same thing. You can calculate the dollar 01:25:07
24 advance of when the employee received it, 01:22:08	24 value of the XRP that was conveyed as of the 01:25:09
25 are you proposing that you would use the 01:22:11	25 time of the conveyance. 01:25:15
Page 110	Page 112
1 value of the XRP at the time it was 01:22:13	1 Q. And if the contract were to have a 01:25:17
2 received, not when the compensation 01:22:14	2 clause that would, for example, make the 01:25:25
3 amount was set? 01:22:17	3 counterparty whole if they were to sell 01:25:30
4 A. I don't know if a person who receives a 01:22:17	4 XRP at a loss, would that be factored into 01:25:32
5 bonus or pay compensation in terms of XRP 01:22:22	5 your analysis of whether that person with 01:25:36
6 is a member of the class. It's something 01:22:29	6 XRP suffered a gain or loss? 01:25:38
7 I'd have to think about. Let me hear your 01:22:33	7 A. I don't know. I really, once you talk about 01:25:41
8 question again, please. 01:22:35	8 a particular contract, I just don't know. 01:25:44
9 Q. Well, I had asked how you would calculate 01:22:36	9 It's a hypothetical and it seems incomplete. 01:25:50
10 the amount, dollar amount paid at the time 01:22:42	10 I don't know the details of this contract to 01:25:54
11 of purchase, how you would apply that to 01:22:44	11 be able to answer that question. 01:25:56
12 someone who received XRP in exchange for 01:22:48	12 Q. Is it fair to say you would need to know 01:25:59
13 their work, and you had said that you'd 01:22:51	13 what the contract says in order to assess 01:26:01
14 look to the value in U.S. dollars of XRP 01:22:55	14 whether that purchaser of XRP suffered, 01:26:04
15 as of the time of the receipt of that 01:22:59	15 sustained a gain or loss? 01:26:07
16 compensation? 01:23:02	16 MR. SPEAR: Objection, calls for 01:26:08
17 A. That's certainly a methodology that could 01:23:03	17 speculation. 01:26:09
18 be done. I'd have to think whether that's 01:23:05	18 A. I just really don't know one way or the 01:26:10
19 the only methodology and the best 01:23:08	19 other. I might not need to know the details 01:26:14
20 methodology. I haven't made a determination 01:23:09	20 of the contract. I might need to know the 01:26:19
21 yet. I'm not even sure I would ever need 01:23:12	21 details of the contract. As I sit here, I 01:26:23
22 to do that calculation. 01:23:15	22 don't know. 01:26:28
23 Q. But it's your testimony that this methodology 01:23:16	23 Q. Is it fair to say that if a contract had 01:26:28
24 expressed here in Paragraphs 19 and 20 could 01:23:26	24 a clause that would affect whether a 01:26:32
25 apply to that situation? 01:23:30	25 purchaser would gain or lose on their sale 01:26:34
Page 111	Page 113



<p>1 XRP? 02:15:13</p> <p>2 A. I don't know for sure. I know that the 02:15:14</p> <p>3 important ones, the common ones it does. 02:15:16</p> <p>4 I know sometimes there's an announcement 02:15:21</p> <p>5 that Bloomberg has taken on a new currency 02:15:23</p> <p>6 so that would tell me at points in time 02:15:27</p> <p>7 it might be omitting a particular currency, 02:15:28</p> <p>8 but I know that in this industry the exchange 02:15:32</p> <p>9 rate data exists. Bloomberg is a good 02:15:35</p> <p>10 source, but if something is missing from 02:15:40</p> <p>11 Bloomberg, there are other sources that can 02:15:41</p> <p>12 be used. 02:15:44</p> <p>13 Q. Do you agree that where XRP is purchased 02:15:44</p> <p>14 or sold pursuant to a bilateral contract, 02:15:50</p> <p>15 that it may be necessary to see the contract 02:15:55</p> <p>16 to apply the damages formula you set forth 02:15:57</p> <p>17 in Paragraphs 19 and 20? 02:16:00</p> <p>18 MR. SPEAR: Objection, asked and 02:16:02</p> <p>19 answered. Objection, calls for speculation. 02:16:02</p> <p>20 Objection, incomplete hypothetical. Go 02:16:05</p> <p>21 ahead. 02:16:08</p> <p>22 A. I'm really not sure. I know that this is 02:16:11</p> <p>23 the kind of detail that claims administrators 02:16:14</p> <p>24 are proficient at handling. They know what 02:16:16</p> <p>25 questions to ask and how to facilitate the 02:16:20</p> <p style="text-align: right;">Page 142</p>	<p>1 I declare under penalty of perjury that the</p> <p>2 foregoing is true and correct. Subscribed at</p> <p>3 _____, _____, this _____ day of</p> <p>4 _____, 20____.</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9 _____</p> <p>10 WITNESS NAME</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p style="text-align: right;">Page 144</p>
<p>1 administration of claims. That's their 02:16:24</p> <p>2 job. I wasn't asked for that level of 02:16:28</p> <p>3 detail. What I was asked to -- what I 02:16:33</p> <p>4 presented in my report is a common damage 02:16:37</p> <p>5 methodology. Some of the implementation 02:16:41</p> <p>6 might require the expertise of a claims 02:16:49</p> <p>7 administrator, but it would be following 02:16:52</p> <p>8 the model that's presented in my report. 02:16:54</p> <p>9 Q. When you refer to the model in your report, 02:16:55</p> <p>10 you're referring to Paragraphs 19 and 20? 02:16:58</p> <p>11 A. Well, 17 and -- 19 and 20 as they are or 02:17:00</p> <p>12 perhaps 19 and 20 as modified based on legal 02:17:05</p> <p>13 determinations. 02:17:09</p> <p>14 Q. Okay. I have no further questions. 02:17:09</p> <p>15 MR. SPEAR: I got nothing. 02:17:22</p> <p>16 VIDEOGRAPHER: The time is 2:17. 02:17:25</p> <p>17 We're off the record. 02:17:27</p> <p>18 (Whereupon the deposition was 02:17:29</p> <p>19 concluded at 2:17 p.m.)</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p style="text-align: right;">Page 143</p>	<p>1 COMMONWEALTH OF MASSACHUSETTS)</p> <p>2 SUFFOLK, SS. )</p> <p>3</p> <p>4</p> <p>5 I, Jeanette Maracas, Registered</p> <p>6 Professional Reporter and Notary Public in</p> <p>7 and for the Commonwealth of Massachusetts,</p> <p>8 do hereby certify that there came before me</p> <p>9 on the 20th day of January, 2023, at 9:41</p> <p>10 a.m., the person hereinbefore named, who</p> <p>11 was by me duly sworn to testify to the truth</p> <p>12 and nothing but the truth of his knowledge</p> <p>13 touching and concerning the matters in</p> <p>14 controversy in this cause; that he was</p> <p>15 thereupon examined upon his oath, and his</p> <p>16 examination reduced to typewriting under my</p> <p>17 direction; and that the deposition is a true</p> <p>18 record of the testimony given by the witness.</p> <p>19</p> <p>20 I further certify that I am neither</p> <p>21 attorney or counsel for, nor related to or</p> <p>22 employed by, any attorney or counsel employed</p> <p>23 by the parties hereto or financially</p> <p>24 interested in the action.</p> <p>25</p> <p>26 In witness whereof, I have hereunto</p> <p>27 set my hand this 25th day of January, 2023.</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p> <p>32</p> <p>33</p> <p>34</p> <p>35</p> <p>36</p> <p>37</p> <p>38</p> <p>39</p> <p>40</p> <p>41</p> <p>42</p> <p>43</p> <p>44</p> <p>45</p> <p>46</p> <p>47</p> <p>48</p> <p>49</p> <p>50</p> <p>51</p> <p>52</p> <p>53</p> <p>54</p> <p>55</p> <p>56</p> <p>57</p> <p>58</p> <p>59</p> <p>60</p> <p>61</p> <p>62</p> <p>63</p> <p>64</p> <p>65</p> <p>66</p> <p>67</p> <p>68</p> <p>69</p> <p>70</p> <p>71</p> <p>72</p> <p>73</p> <p>74</p> <p>75</p> <p>76</p> <p>77</p> <p>78</p> <p>79</p> <p>80</p> <p>81</p> <p>82</p> <p>83</p> <p>84</p> <p>85</p> <p>86</p> <p>87</p> <p>88</p> <p>89</p> <p>90</p> <p>91</p> <p>92</p> <p>93</p> <p>94</p> <p>95</p> <p>96</p> <p>97</p> <p>98</p> <p>99</p> <p>100</p> <p>101</p> <p>102</p> <p>103</p> <p>104</p> <p>105</p> <p>106</p> <p>107</p> <p>108</p> <p>109</p> <p>110</p> <p>111</p> <p>112</p> <p>113</p> <p>114</p> <p>115</p> <p>116</p> <p>117</p> <p>118</p> <p>119</p> <p>120</p> <p>121</p> <p>122</p> <p>123</p> <p>124</p> <p>125</p> <p>126</p> <p>127</p> <p>128</p> <p>129</p> <p>130</p> <p>131</p> <p>132</p> <p>133</p> <p>134</p> <p>135</p> <p>136</p> <p>137</p> <p>138</p> <p>139</p> <p>140</p> <p>141</p> <p>142</p> <p>143</p> <p>144</p> <p>145</p> <p>146</p> <p>147</p> <p>148</p> <p>149</p> <p>150</p> <p>151</p> <p>152</p> <p>153</p> <p>154</p> <p>155</p> <p>156</p> <p>157</p> <p>158</p> <p>159</p> <p>160</p> <p>161</p> <p>162</p> <p>163</p> <p>164</p> <p>165</p> <p>166</p> <p>167</p> <p>168</p> <p>169</p> <p>170</p> <p>171</p> <p>172</p> <p>173</p> <p>174</p> <p>175</p> <p>176</p> <p>177</p> <p>178</p> <p>179</p> <p>180</p> <p>181</p> <p>182</p> <p>183</p> <p>184</p> <p>185</p> <p>186</p> <p>187</p> <p>188</p> <p>189</p> <p>190</p> <p>191</p> <p>192</p> <p>193</p> <p>194</p> <p>195</p> <p>196</p> <p>197</p> <p>198</p> <p>199</p> <p>200</p> <p>201</p> <p>202</p> <p>203</p> <p>204</p> <p>205</p> <p>206</p> <p>207</p> <p>208</p> <p>209</p> <p>210</p> <p>211</p> <p>212</p> <p>213</p> <p>214</p> <p>215</p> <p>216</p> <p>217</p> <p>218</p> <p>219</p> <p>220</p> <p>221</p> <p>222</p> <p>223</p> <p>224</p> <p>225</p> <p>226</p> <p>227</p> <p>228</p> <p>229</p> <p>230</p> <p>231</p> <p>232</p> <p>233</p> <p>234</p> <p>235</p> <p>236</p> <p>237</p> <p>238</p> <p>239</p> <p>240</p> <p>241</p> <p>242</p> <p>243</p> <p>244</p> <p>245</p> <p>246</p> <p>247</p> <p>248</p> <p>249</p> <p>250</p> <p>251</p> <p>252</p> <p>253</p> <p>254</p> <p>255</p> <p>256</p> <p>257</p> <p>258</p> <p>259</p> <p>260</p> <p>261</p> <p>262</p> <p>263</p> <p>264</p> <p>265</p> <p>266</p> <p>267</p> <p>268</p> <p>269</p> <p>270</p> <p>271</p> <p>272</p> <p>273</p> <p>274</p> <p>275</p> <p>276</p> <p>277</p> <p>278</p> <p>279</p> <p>280</p> <p>281</p> <p>282</p> <p>283</p> <p>284</p> <p>285</p> <p>286</p> <p>287</p> <p>288</p> <p>289</p> <p>290</p> <p>291</p> <p>292</p> <p>293</p> <p>294</p> <p>295</p> <p>296</p> <p>297</p> <p>298</p> <p>299</p> <p>300</p> <p>301</p> <p>302</p> <p>303</p> <p>304</p> <p>305</p> <p>306</p> <p>307</p> <p>308</p> <p>309</p> <p>310</p> <p>311</p> <p>312</p> <p>313</p> <p>314</p> <p>315</p> <p>316</p> <p>317</p> <p>318</p> <p>319</p> <p>320</p> <p>321</p> <p>322</p> <p>323</p> <p>324</p> <p>325</p> <p>326</p> <p>327</p> <p>328</p> <p>329</p> <p>330</p> <p>331</p> <p>332</p> <p>333</p> <p>334</p> <p>335</p> <p>336</p> <p>337</p> <p>338</p> <p>339</p> <p>340</p> <p>341</p> <p>342</p> <p>343</p> <p>344</p> <p>345</p> <p>346</p> <p>347</p> <p>348</p> <p>349</p> <p>350</p> <p>351</p> <p>352</p> <p>353</p> 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